

Seal & Protect (Project 00-14) (01/01)

Seal & Protect is a clear solution supplied in a squeeze bottle that is recommended for the treatment of exposed, sensitive root-surface dentin. It is also recommended for reducing the dentin's abrasion and erosion. Seal & Protect's ability to reduce sensitivity, erosion, and abrasion is purportedly due to its ability to infiltrate and seal dentin tubules. The product consists of methacrylate resins, PENTA, nanofillers, Triclosan (a broad spectrum antibacterial agent), and acetone. Photoinitiators and stabilizers are also present.



To apply the product, the area to be treated is isolated, rinsed, and blot dried. Seal & Protect is then applied in sufficient amounts to keep the area wet for 20 seconds. A gentle stream of compressed air is used to volatilize the acetone solvent and the material is light cured for 10 seconds. A second coat is then applied, dried, and light activated. Dentsply/Caulk claims the product provides symptomatic relief for up to 6 months.

Manufacturer:

L.D. Caulk Division
Dentsply International, Inc.
P.O. Box 359
Milford, DE 19963-0359
(800) 532-2855
(302) 422-4511
(800) 788-4110 FAX
www.caulk.com

Suggested Retail Price:

\$166.65 Seal & Protect Standard Kit (item number 658001) contains:

- two 4.5-mL bottles of Seal & Protect
- 80 disposable brush tips
- brush handle
- dispensing well
- instructions and illustrated technique guide

Government Price:

\$100.00 Seal & Protect Standard Kit (item number and contents as listed above)

ADVANTAGES:

- + Users judged it to be easy and fast to apply.
- + Generally effective at providing months-long relief of sensitivity.
- + Effects took place immediately after treatment.
- + Instructions are clear and concise.
- + Provided with a Material Safety Data Sheet (MSDS).

DISADVANTAGES:

- Requires two separate applications.
- Must be light activated.
- Provided only partial pain relief for some patients.
- Clinicians found that its viscosity made it difficult to apply in a thin layer in the cervical third of treated teeth.
- Product box is larger than it needs to be.

SUMMARY AND CONCLUSIONS:

Seal & Protect is a light-activated, resin-based solution applied to exposed, sensitive dentin for pain relief. The product was reported by clinical users to be effective for approximately 85% of treated patients, providing either partial or total relief from pain immediately after application. The users appreciated the product's ease and speed of placement. This is somewhat surprising because Seal & Protect is applied in two separate coats and must be light activated. Duration of relief varied by patient, however it often lasted several months. Product instructions are simple and clear and a Material Safety Data Sheet is included in the box. The packaging is wasteful because the box is large relative to the amount of product included. **Seal & Protect** is rated **Acceptable** for use by the federal dental services.